fw

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/408,873	09/29/1999	MAURITIUS SEEGER	D/99487	4555

7590 07/01/2005

JOHN E BECK
XEROX CORPORATION
XEROX SQUARE 20A
ROCHESTER, NY 14644

EXAMINER	
MISLEH, JUSTIN P	
ART UNIT	**PAPER NUMBER**
2612	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/408,873	SEEGER ET AL.
	Examiner	Art Unit
	Justin P. Misleh	2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18, 20, and 25 - 42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18, 20, 25 - 33, and 36 - 40* is/are rejected.

7)☒ Claim(s) *34,35,41 and 42* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Appeal Brief, filed 28 March 2005, with respect to the rejection of "First Group Of Claims" 18, 20, 29 – 35, and 38 - 42 have been fully considered and ARE persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Saund.

2. Applicant's arguments, see Appeal Brief, filed 28 March 2005, with respect to the rejection of "Second Group Of Claims" 25 – 27 have been fully considered and ARE NOT persuasive.

3. However, since Applicant's amendments to independent Claims 18 and 29 in the submission of 9 June 2004 warranted a new grounds of rejection in view of Taylor et al. (see Final Office Action; 23 August 2004) and since the grounds of rejection of unamended independent Claim 25 was sustained (also see Final Office Action), this Office Action is made Final and is meant to replace the previous Final Office Action.

Second Group of Claims 25 – 27

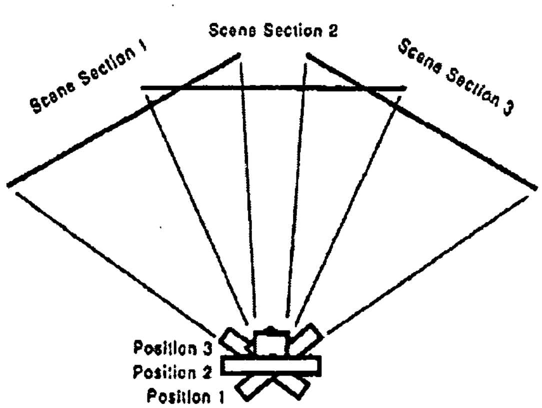
4. Applicant argues, "Chevrette fails to disclose or suggest rotating a camera, and any rotation of the camera as taught by Anderson fails to retain the lens in an offset position within a plane substantially orthogonal to the optical axis of the lens."

5. While the Examiner AGREES with Applicant's uncombined individual interpretation of Anderson and uncombined individual interpretation of Chevrette, the Examiner DISAGREES

with Applicant's interpretation of the combined teachings of Anderson in view of Chevrette. Applicant's arguments are traversed for the following reasons:

Anderson (US 6 657 667 B1)

As correctly interpreted by Applicant (see Appeal Brief, page 11), Anderson discloses a method for capturing overlapping images by rotating a camera about an axis perpendicular to the optical axis of the lens of the camera. Figures 6A and 6B (shown below) are diagrams illustrating the capture of a series of overlapping images by a camera for use in composite image generation. More specifically, Figure 6A is a top view showing the camera rotated into three positions to capture three corresponding images and Figure 6B shows a capture sequence that results in one row of three images, or a 1 x 3 panorama. Anderson states, "the present invention enables a user to manually capture a multidimensional array of overlapping images for use in composite image generation, rather than a one-dimensional array."



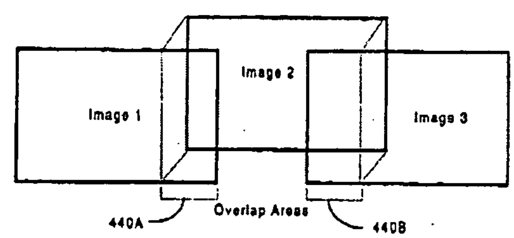


FIG. 6B

Chevrette et al. (US 5 774 179)

Also as correctly interpreted by Applicant (see Appeal Brief, pages 9 and 10), Chevrette et al. discloses a method for fast microscanning that uses a movable lens. Figures 1d and 2 (shown below) disclose the principles of microscanning, which involves moving a lens a distance of a half a pixel pitch to record a microscanned image (e.g., the four single number images in Fig. 1d) and "interlacing" the four microscanned images to arrive at the final image (e.g., the large image with numbers 1-4 in it). Microscanning has the effect of increasing the spatial resolution (i.e.. reciprocal sampling interval on object plane, e.g. DPI) and the pixel resolution (i.e., number of pixels). In the example in Figure 1d, the four single-number images have a lower spatial and a lower pixel resolution then the final image with numbers 1 – 4.

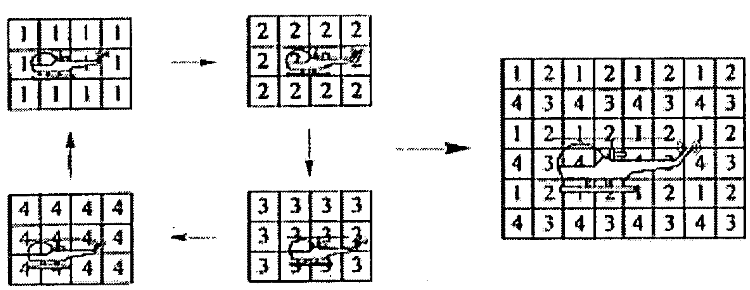


Fig. 1d

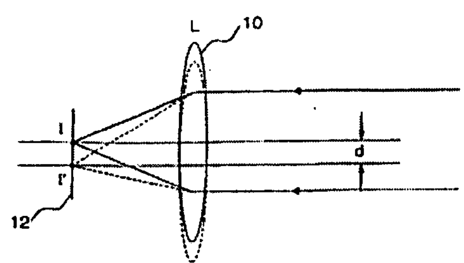


Fig. 2

Anderson in view of Chevrette et al.

6. Applicant specifically states, "Chevrette fails to disclose or suggest rotating a camera, and any rotation of the camera as taught by Anderson fails to retain the lens in an offset position within a plane substantially orthogonal to the optical axis of the lens."

7. Anderson, the primary reference, at least discloses capturing an image while the camera is in a first position, rotating the camera to another position and capturing a second image, and continuing to rotate and capture until all views of an area are captured and then generating a final high-resolution composite image of all captured images. Chevrette et al., the secondary reference, at least discloses capturing an image while the lens of a camera is in an offset position, moving the lens to another offset position and capturing a second image, and continuing to move and capture until all views of an area are captured and then generating a final high-resolution microscanned image.

8. Hence, the combination of Anderson in view Chevrette et al., as shown in the Examiner-generated exemplary Figure A below, would yield an extremely high-resolution panoramic image of an area generated from Image 1, Image 2, and Image 3, wherein Image 1 was captured when the camera is in a first position using the offset lens microscanning method of Chevrette et al., wherein Image 2 was captured when the camera is in a second position also using the offset lens microscanning method of Chevrette et al., and wherein Image 3 was captured when the camera is in a third position again using the offset lens microscanning method of Chevrette et al. As clearly shown in Figure A, the lens is offset to offset position 1 in each of Images 1, 2, and 3; the lens is offset to offset position 2 in each of Images 1, 2, and 3; the lens is offset to offset position 3 in each of Images 1, 2, and 3; and the lens is offset to offset position 4 in each of

Images 1, 2, 3 (see Chevrette et al. Figure 1d for reference), thereby guaranteeing that the lens is in the same offset position when the camera is rotated from position to position.

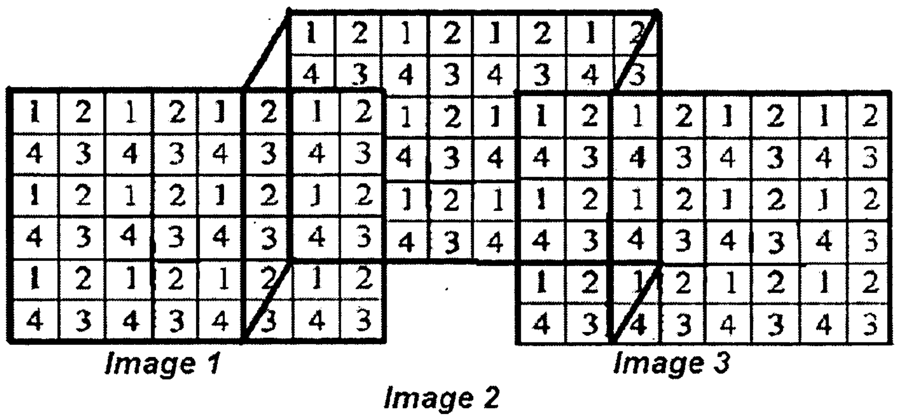


FIGURE A

9. Therefore, the combination of Anderson in view of Chevrette et al. does in fact teach and fairly suggest all limitations of at least independent Claim 25 and more specifically, Anderson in view of Chevrette et al. teach that any rotation of the camera would indeed retain the lens in an offset position within a plane substantially orthogonal to the optical axis of the lens.

<u>**Third Group of Claim 28**</u>

10. Applicant argues, that Kang does not permit the lens to be positioned at an offset position within a plan substantially orthogonal to an optical axis of the lens to record a first image and a second image while the camera is in two positions one position 180 degrees rotated from the other."

11. It is noted that Applicant has provided absolutely no support for the allegation above; hence, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a

general allegation that the claims define a patentable invention without specifically pointing out HOW the language of the claims patentably distinguishes them from the references.

Fourth Group of Claims 36 and 37

12. Applicant argues, Ejiri fails to disclose or suggest rotating a camera about an axis parallel to the optical axis of a camera lens from first position to a second position because Figure 5 at least does not disclose or suggest such a rotation.

13. The Examiner disagrees with Applicant's position. Figure 6 is merely a 3D view of Figure 6. Moreover, Figure 6 clearly indicates that the camera (position O) is rotated both along an axis parallel to the optical axis of the lens (γ rotation) and along an axis perpendicular to the optical axis of the lens (ξ rotation). Figure 5 confirms this position by demonstrating that the center points (P1 and P2) of the images (31 and 32) DO NOT lie on the same plane in both the horizontal and vertical positions.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. **Claims 18, 20, 29 – 33, and 38 – 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saund (US 5 528 290) in view of Chevrette et al.** The Examiner's responses to arguments above are fully incorporated into these rejections.

16. For **Claims 18 and 29**, Saund disclose, as shown in figures 1 and 3 and as stated in columns 3 (lines 12 – 35) and the abstract, an image acquisition system and a corresponding method (see figure 1), comprising a plurality of cameras (camera subsystem 54 includes a plurality of arrayed cameras) records a plurality of views (see figure 3) an area having one or more objects (blackboard 52 is an object) to produce a plurality of camera images of different portions of the area (62, 64, and 66 of figure 3; also see column 3, lines 40 – 52), each camera (camera subsystem 54) having a lens positioned within a plane substantially orthogonal to an optical axis of the lens (see column 3, lines 30 – 35; As stated, each captured image contains perspective distortion causes by each camera having an off-axis viewpoint. Therefore, it must be that each camera a lens positioned within a plane substantially orthogonal to an optical axis of the lens), wherein the view of each camera is positioned to record a portion of the area (see figure 3); and

an image processing system (computer 56) coupled to the plurality of cameras (54) and operable to combine the plurality of camera images recorded to produce a composite image having a higher resolution than the resolution of one or more of the simultaneously recorded view of the area (see column 3 lines 12 – 53).

While Saund discloses an array (plurality) of cameras (54) capturing a plurality of images (see figure 3) to form a high-resolution composite image, Saund does not disclose that images are captured b the cameras simultaneously and wherein at least one of the cameras has an offset lens to produce an oblique field of view of the portion it records of the area and wherein the offset lens of the at least one camera may be shifted to one of a plurality of offsets.

On the other hand, Chevrette et al. also disclose a system and method for generating a high-resolution image. More specifically, Chevrette et al. discloses a method for fast microscanning that uses a movable lens. Figures 1d and 2 disclose the principles of microscanning, which involves moving a lens a distance of a half a pixel pitch to record a microscanned image (e.g., the four single number images in Fig. 1d) and "interlacing" the four microscanned images to arrive at the final image (e.g., the large image with numbers 1-4 in it). Microscanning has the effect of increasing the spatial resolution (i.e.. reciprocal sampling interval on object plane, e.g. DPI) and the pixel resolution (i.e., number of pixels). In the example in Figure 1d, the four single-number images have a lower spatial and a lower pixel resolution then the final image with numbers 1 – 4. Hence, Chevrette et al. at least teaches capturing an image while the lens of a camera is in an offset position, moving the lens to another offset position and capturing a second image, and continuing to move and capture until all views of an area are captured and then generating a final high-resolution microscanned image.

Therefore, Chevrette et al. does in fact provide (as shown in FIGURE A above) wherein at least one of the cameras has an offset lens to produce an oblique field of view of the portion it records of the area and wherein the offset lens of the at least one camera may be shifted to one of a plurality of offsets. The combination of Saund in view Chevrette et al., would yield an extremely high-resolution image of an area generated from captured image tiles 62 – 66, wherein captured image 62 was captured by one camera of the array using the offset lens microscanning method of Chevrette et al., wherein captured image 64 was captured by another one camera of the array also using the offset lens microscanning method of Chevrette et al., and wherein

captured image 66 was captured by another one camera of the array using the offset lens microscanning method of Chevrette et al.

As stated in columns 1 (lines 34 – 67) and 2 (lines 1 – 36) of Chevrette et al., at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include the offset lens microscanning method, taught by Chevrette et al., in the image acquisition system and method, disclosed by Saund, for the advantage capturing high-resolution low noise images using a robust, inexpensive, and low power configuration.

In regards to simultaneously recording a plurality of images by a plurality of respective cameras, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of simultaneously recording a plurality of images by a plurality of respective cameras are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have simultaneously recorded a plurality of images by a plurality of respective cameras for the advantage of increasing image capturing time so as to reduce processing time and power required for color imagery registration of time-sequenced captured images.

17. As for **Claims 20 and 30**, according to *The American Heritage® Dictionary of the English Language, Fourth Edition*, a mosaic is a composite picture made of overlapping, usually aerial, photographs. Thus, as shown in figures 3 and 8 and as stated in column 3 (lines 16 – 21 and 30 – 35), Saund discloses, the image acquisition system of Claim 18 and method of Claim 29, wherein the image processing system (computer 56) is operable to produce the composite image by mosaicing the camera images.

18. As for **Claims 31 and 38**, Saund discloses, as shown in figure 3 and as stated in columns 3 (lines 16 – 21 and 30 – 35), the image acquisition system of Claim 18 and method of Claim 29, wherein the image processing system (computer 56) is operable to combine the plurality of cameras (camera subsystem 54 including array of cameras) to produce a composite image of the plurality of views by patching the plurality of camera images together at regions of overlap.

19. As for **Claims 32 and 39**, Saund discloses, as shown in figure 1 and as stated in column 3 (lines 22 – 29), that camera subsystem (54) may comprise an array of fixed or rotatable cameras; however, Saund is silent with regard to the housing of the camera subsystem (54) and, likewise, wherein the plurality of cameras are arranged together in a housing.

Albeit, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of arranging a plurality of cameras together in a housing are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have for the advantage of reducing expense, operations and computations required in forming a composite image.

20. As for **Claims 33 and 40**, Saund discloses, as shown in figure 1, wherein the plurality of cameras (54) are positioned over a blackboard (52); however, Saund is silent with regard to positioning the cameras over a desk.

Albeit, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of positioning a plurality of cameras over a desk are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have for the advantage of reducing vibration and camera shake thereby providing a high-quality image without significant distortion.

21. <u>**Claims 25 – 27**</u> **are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Chevrette et al.** The Examiner's responses to arguments above are fully incorporated into these rejections.

22. For **Claim 25**, Anderson discloses, as shown in figures 2 and 6 – 10 and as stated in columns 6 (lines 8 – 67), 7, 8, 9, and 10 (lines 1 – 14), a method of scanning with a camera, comprising the steps of:

(a) recording a first view (positions 1, 2, or 3) of an area having one or more objects (scene sections 1, 2, or 3) while a lens (220) is positioned in a plane substantially orthogonal to an optical axis (236) of the lens (220) while the camera is at a first position (see figures 2, 6, and 9);

(b) recording a second view (positions 1, 2, or 3) of the area (scene sections 1, 2, or 3) while the lens (220) is positioned in the plane after the camera is rotated to a second position (positions 1, 2, or 3 as shown in figures 6 and 9); and

(c) combining all recorded views to produce a composite image having a higher resolution than the resolution of one or more of the recorded views (see figures 8 – 10).

Anderson discloses a method for capturing overlapping images by rotating a camera about an axis perpendicular to the optical axis of the lens of the camera. Figures 6A and 6B (shown below) are diagrams illustrating the capture of a series of overlapping images by a camera for use in composite image generation. More specifically, Figure 6A is a top view showing the camera rotated into three positions to capture three corresponding images and Figure 6B shows a capture sequence that results in one row of three images, or a 1 x 3 panorama. Anderson states, "the present invention enables a user to manually capture a multidimensional

array of overlapping images for use in composite image generation, rather than a one-dimensional array." Although Anderson does not disclose wherein the lens is positioned at an offset position within in a plane substantially orthogonal to an optical axis of the lens.

On the other hand, Chevrette et al. also disclose a method for generating a high-resolution image. More specifically, Chevrette et al. discloses a method for fast microscanning that uses a movable lens. Figures 1d and 2 (shown below) disclose the principles of microscanning, which involves moving a lens a distance of a half a pixel pitch to record a microscanned image (e.g., the four single number images in Fig. 1d) and "interlacing" the four microscanned images to arrive at the final image (e.g., the large image with numbers 1-4 in it). Microscanning has the effect of increasing the spatial resolution (i.e.. reciprocal sampling interval on object plane, e.g. DPI) and the pixel resolution (i.e., number of pixels). In the example in Figure 1d, the four single-number images have a lower spatial and a lower pixel resolution then the final image with numbers 1 – 4.

As stated in columns 1 (lines 34 – 67) and 2 (lines 1 – 36) of Chevrette et al., at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include the offset lens microscanning method, taught by Chevrette et al., in the method for capturing overlapping images by rotating a camera about an axis perpendicular to the optical axis of the lens of the camera, disclosed by Anderson, for the advantage capturing high-resolution low noise images using a robust, inexpensive, and low power configuration.

23. As for **Claim 26**, Anderson disclose, as clearly shown in figures 8 – 10, the method of Claim 25, further comprising between step (b) and (c), the step of:

(d) recording a next view (positions 1, 2, or 3) of the area (scene sections 1, 2, or 3) while the lens is positioned at the offset position (see obvious ness set forth above) within the plane while the camera is rotated to a third position.

24. As for **Claim 27**, Anderson disclose, as clearly shown in figures 8 – 10, the method of Claim 26, further comprising the step of:

(e) repeating step (d) unit all view of the area have been recorded.

25. **<u>Claim 28</u> is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Chevrette et al. in further view of Kang et al.** The Examiner's responses to arguments above are fully incorporated into these rejections.

26. For **Claim 28**, Anderson view of Chevrette et al. show a method a method of scanning with a camera, comprising the steps of recording a first view of an area while a lens is positioned at an offset position within in a plane, recording a second view of the area while the lens is positioned in the plane after the camera is rotated to a second position, and combining all recorded views to produce a composite image having a higher resolution than the resolution of one or more of the recorded views. However, Anderson in view of Chevrette et al. do not show wherein step (b) further comprises the step of recording the second view of the area while the lens is position at the offset position with the plane while the camera is rotated 180 degrees to the second position.

On the other hand, Kang et al. also shows, as seen in figures 1- 3 and column 3 (lines 30 – 60), a method of scanning with a camera including at least two recorded views of an area wherein the camera (100) is in a first position to record a first view (314) and the camera is

rotated (about axis 276) to a second position, 180 degrees from the first position, to record a second view (319) of the area. As stated in column 1 (lines 10 – 60), at the time the invention was made, one with ordinary skill in the art would have been motivated to include a method of scanning with a camera wherein the camera records a first view in a first position and is rotated 180 degrees to a second position to record a second view, as taught by Kang et al., in the method of scanning with a camera, or Anderson in view of Chevrette et al. as a means to record a panoramic image. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include a method of scanning with a camera wherein the camera records a first view in a first position and is rotated 180 degrees to a second position to record a second view, as taught by Kang et al., in the method of scanning with a camera, or Anderson in view of Chevrette et al.

27. **Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Chevrette et al. in further view of Ejiri et al.** The Examiner's responses to arguments above are fully incorporated into these rejections.

28. As for **Claims 36 and 37**, Anderson discloses, as shown in figure 6A, recording a first view of an area while the camera is at a first position and recording a second view of the area after the camera is rotated to a second position. Anderson discloses that the camera is rotated to all positions about an axis perpendicular to the optical axis of the camera lens and does not disclose that the camera is rotated to all positions about an axis parallel to the optical axis of the camera lens.

On the hand, Ejiri et al. also disclose a camera scanning method operable to produce a composite image by mosaicing a plurality of camera images. More specifically, Ejiri et al. teach, as shown in figure 5 and as stated in column 5 (lines 62 – 66), that the plurality of images are recorded while the camera is rotated (by angle γ) to all positions (31 and 32) about an axis parallel to the optical axis of the camera lens (O). As shown in figure 6, the angle γ corresponds to the rotation of the camera about an axis (ξ) that is parallel to the optical axis of the camera (O). As stated in column 1 (lines 25 – 39, 61, and 62), at the time the invention was made, one with ordinary skill in the art would have been motivated to record a plurality of views while the camera is rotated to all positions about an axis parallel to the optical axis of the camera lens, as taught by Ejiri et al., in the camera scanning method, taught by Anderson in view of Chevrette et al., as a means to form a composite image with a naturally continuous appearance comprised of a plurality of distortion free images wherein the relative angle of each of the plurality of individual images is not readily available. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have recorded a plurality of views while the camera is rotated to all positions about an axis parallel to the optical axis of the camera lens, as taught by Ejiri et al., in the camera scanning method, taught by Anderson in view of Chevrette et al.

Allowable Subject Matter

29. **Claims 34, 35, 41, and 42** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

30. At least for **Claims 34 and 41**, the combination of Saund in view Chevrette et al., which is regarded as the closest prior art, yields an extremely high-resolution image of an area generated from captured image tiles, wherein a first captured image is captured by one camera of the array using an offset lens microscanning method, wherein a second captured image is captured by another one camera of the array also using the offset lens microscanning, and wherein at least a third captured image is captured by another one camera of the array using the offset lens microscanning method. However, the closest prior art does not teach or fairly suggest wherein at least a second of the plurality of cameras as a fixed offset lens to produce an oblique field of view.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:30 PM and on alternating Fridays from 7:30 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
June 27, 2005

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600